

AMENDMENTS TO THE CLAIMS

The following is a complete listing of all claims presently in this application, identifying the currently amended, previously presented, and cancelled claims resulting from this paper.

Claims 1-182 (Canceled)

(Currently Amended) 183. A medication delivery system for delivering medication to a patient, said system comprising:

a base housing with a reservoir for storing medication;
a pump assembly attached to said base housing, said pump assembly having: a pump chamber that is ~~e~~ in a permanently fixed position relative to said base housing; a pump head moveably mounted to said base housing to force fluid out of the pump chamber; an inlet connecting the reservoir to the pump chamber; an outlet from the pump chamber; an inlet valve for regulating fluid flow through the inlet; an outlet valve for regulating fluid flow through the outlet; a valve regulator for regulating said valves so that when one said valve is an open state, the other said valve is in the closed state; and
a rigid actuator moveably mounted to said base housing adjacent said pump assembly that is not connected to said valve regulator for displacement by said valve regulator, said actuator ~~member~~ having a first position in which said actuator simultaneously abuts both said ~~first~~ inlet and ~~second~~ outlet valves to simultaneously hold both said valves in the open state and a second position wherein said actuator ~~member~~ is spaced from said valves so that said valves are able to cycle between the open and closed states.

(Currently Amended) 184. The medication delivery system of Claim 183, wherein at least one of said ~~first inlet~~ or ~~second outlet~~ valves is a pinch valve.

(Previously Presented) 185. The medication delivery system of Claim 183, wherein said pump head includes at least one piston that moves in a reciprocal pattern.

(Previously Presented) 186. The medication delivery system of Claim 183, further including:

a port housing attached to said base housing, said port housing having: a first port connected to said pump to receive fluid flow from the pump outlet; and a second port in fluid communication with the first port, the second port configured for receiving a tube set through which medication is delivered to the patient; and

a plunger moveably attached to said base housing, said plunger positioned to selectively abut said actuator to move said actuator from said first position to said second position.

(Previously Presented) 187. The medication delivery system of Claim 186, wherein said plunger is positioned so that, when the tube set is attached to said port housing, said tube set abuts said plunger so as to displace said plunger.

(Previously Presented) 188. The medication delivery system of Claim 186, wherein:

said port housing includes a fluid chamber located between the first port and the second port; and

said plunger is at least partially disposed in the port housing fluid chamber.

(Previously Presented) 189. A medication delivery system for delivering medication to a patient, said system comprising:

a base housing having a reservoir for storing medication;

a pump assembly attached to said base housing, said pump assembly having: a pump chamber that is defined by a structural member fixedly mounted to said base housing; an inlet from the reservoir into the pump chamber; an outlet from the pump chamber; and a pump head moveably mounted in the pump chamber; and

a valve assembly attached to said base housing; said valve assembly including: an inlet valve for regulating fluid flow through the pump assembly inlet; and an outlet valve for regulating fluid flow through the pump assembly outlet;

a drive assembly for actuating said pump head and said valves, said drive assembly configured to actuate said valves so that when said inlet valve is in an open state, said outlet valve is in a closed state and, when said outlet valve is in an open state, said inlet valve is in a closed state; and

a rigid actuator rod movingly mounted to said base housing, said actuator rod being disconnected from said drive assembly for movement by said drive assembly and having an engaged state wherein said actuator rod simultaneously butts against both said valves to simultaneously hold said valves in the open state and a disengaged state wherein said actuator rod is spaced from both said valves to allow both said valves to cycle between the open and closed states.

(Previously Presented) 190. The medication delivery system of Claim 189, further including a plunger moveably mounted to said base housing, said plunger positioned to move said actuator rod from the engaged state to the disengaged state.

(Previously Presented) 191. The medication delivery system of Claim 189, further including:

a port housing mounted to said base housing, said port housing having an outlet port in fluid communication with the pump assembly outlet, said outlet port configured to receive a tube set through which medication is delivered; and

a plunger moveably mounted to said housing and positioned to be displaced upon attachment of the tube set to the port housing outlet port and further positioned to drive said actuator rod, so that, upon attachment of the tube set to the port housing outlet port, said plunger is displaced so that said plunger drives said actuator rod from the engaged state to the disengaged state.

(Previously Presented) 192. The medication delivery system of Claim 189, further including:

a port housing attached to said base housing, said port housing having: a first port in fluid connection with said reservoir; a second port connected to the pump assembly outlet port; and a third port, the third port configured to receive a tube set through which medication is delivered; and

a valve member disposed in said port housing said valve member having a first position for establishing a fluid communication path between said first port and said third port and second position for establishing a fluid communication path between said second port and said third port.

(Previously Presented) 193. The medication delivery system of Claim 192, further including a driver that is moveably coupled to said valve member and that extends to said actuator rod, said driver positioned so that, when said valve member is actuated to establish a fluid communications path between the port housing second port and the port housing third port, said driver displaces said actuator rod from the engaged state to the disengaged state.

(Previously Presented) 194. The medication delivery system of Claim 192, wherein said valve member has a third position for preventing communication path between said third port and said first and second ports.

(Currently Amended) 195. A medication delivery system for delivering medication to a patient, said system including:

- a base housing;

- a reservoir integral with said base housing, said reservoir having a void space for holding medication;

- a pump assembly attached to said base housing, said pump assembly including: a pump chamber having an inlet through which fluid is received from the reservoir void space and outlet through which fluid is discharged; and a pump head moveably disposed in the pump chamber for forcing fluid from the inlet through the outlet;

- an inlet valve for regulating fluid flow through the pump chamber inlet;

- an outlet valve for regulating fluid flow through the pump chamber outlet;

a drive assembly for actuating said pump head, said inlet valve and said outlet valve, said drive assembly configured to actuate said inlet and outlet valves so that, when said inlet valve is in an open state, said outlet valve is in a closed state and, when said outlet valve is in an open state, said inlet valve is in a closed state;

a port housing attached to said base housing, said port housing having a first port that is in fluid communication with the pump chamber outlet and that is configured to receive a tube set through which medication is delivered;

a rigid actuator moveably mounted to said base housing that is disconnected from said drive assembly for movement by said drive assembly, said actuator having an engaged position wherein said actuator engages said inlet valve and said outlet valve to simultaneously hold both said valves in the open state and a disengaged position wherein said actuator allows both said valves to cycle between the open and closed states; and

a plunger moveably mounted to said base housing and positioned to be displaced upon attachment of tube set to the port housing first port, said plunger positioned to, upon displacement, drive said actuator from the engaged position to the disengaged position.

(Currently Amended) 196. The medication delivery system of Claim 195, wherein at least one of said inlet valve or said outlet valve is a pinch valve.

(Previously Presented) 197. The medication delivery system of Claim 195, wherein said pump head includes at least one piston that moves in a reciprocal pattern.

(Previously Presented) 198. The medication deliver system of Claim 195, wherein:

said port housing includes a second port in fluid communication with the reservoir void space and a third port in fluid communication with the pump chamber outlet; and

a port valve moveably attached to said port housing for establishing a fluid communications path between the port housing first port and the port housing second port or between the port housing first port and the port housing third port.

(Previously Presented) 199. The medication delivery system of Claim 198, wherein said port valve selectively prevents fluid communication between said first port and said second port and said third port.

(Previously Presented) 200. The medication delivery system of Claim 198, wherein said plunger is coupled to said port valve so that, when said port valve is actuated to establish a fluid communications path between the port housing first port and the port housing third port, said plunger moves so as to displace said actuator.

(Previously Presented) 201. The medication delivery system of Claim 198, wherein said plunger and said port valve are a single component, the component having a section disposed in said port housing that functions as said port valve and a section that extends outside of said port housing that functions as said plunger.